



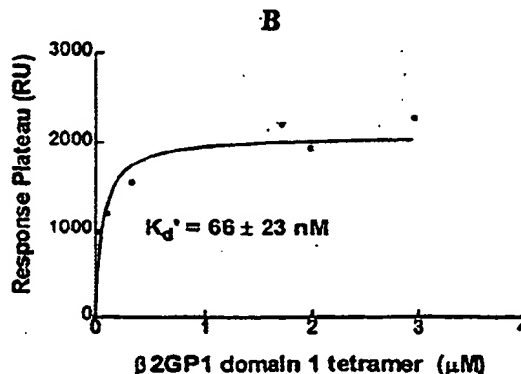
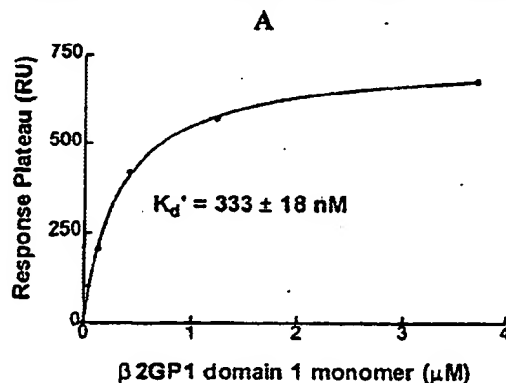
## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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(21) International Application Number: <b>PCT/US99/13194</b> (22) International Filing Date: <b>9 June 1999 (09.06.99)</b> (30) Priority Data: 60/088,656 9 June 1998 (09.06.98) US 60/103,088 5 October 1998 (05.10.98) US 09/328,199 8 June 1999 (08.06.99) US (71) Applicant (for all designated States except US): <b>LA JOLLA PHARMACEUTICAL COMPANY (US/US); Suite 300, 6455 Nancy Ridge Drive, San Diego, CA 92121 (US).</b> (72) Inventors; and (75) Inventors/Applicants (for US only): <b>MARQUIS, David, M. (US/US); 2106 Meadowgreen Court, Encinitas, CA 92024 (US). IVERSON, Gilbert, M. (US/US); 13784 Boquita Drive, Del Mar, CA 92014 (US). VICTORIA, Edward, J. (US/US); 3503 Pershing Avenue, San Diego, CA 92104 (US). JONES, David, S. (US/US); 11265 Florindo Road, San Diego, CA 92127 (US). LINNIK, Matthew, D. (US/US); 12604 Torrey Bluff Drive #38, San Diego, CA 92130 (US).</b> (74) Agents: <b>POLIZZI, Catherine, M. et al.; Morrison &amp; Foerster LLP, 755 Page Mill Road, Palo Alto, CA 94304-1018 (US).</b>		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).  <b>Published</b> <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>	

(54) Title: THERAPEUTIC AND DIAGNOSTIC DOMAIN I  $\beta_2$ GPI POLYPEPTIDES AND METHODS OF USING SAME

## (57) Abstract

The present invention provides domain I  $\beta_2$ GPI polypeptides, polynucleotides encoding these polypeptides, mimetics of these polypeptides, and methods using domain I  $\beta_2$ GPI polypeptides and mimetics. Domain I of  $\beta_2$ GPI has been shown to bind to anti-cardiolipin ( $\beta_2$ GPI-dependent antiphospholipid) antibodies, which are associated with several pathologies, such as thrombosis and fetal loss. The domain I  $\beta_2$ GPI polypeptides may be used to detect  $\beta_2$ GPI-dependent antiphospholipid antibodies in a sample. The invention further provides methods of inducing tolerance using these domain I  $\beta_2$ GPI polypeptides.

<sup>6</sup>(Referred to in PCT Gazette No. 36/2000, Section II)